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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/788,490	BIBR ET AL.
	Examiner	**Art Unit**	
	Ben C. Wang	2192	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 March 2004</u>.

2a)☐ This action is **FINAL**.　　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-37</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-37</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date <u>12/15/2005</u>.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-37 are pending in this application and presented for examination.

Drawing Objections

2.   The drawing is objected to because the following informalities:

- The labels of "900", "902", "904", "906", "908", "910", "912", "914", cited

    in Fig. 6, should be corrected as "600", "602", "604", "606", "608",

    "610", "612", "614" respectively

- The labels of "1000", "1002", "1003", "1004", "1006", "1008", "1010",

    "1012", "1014", cited in Fig. 7, should be corrected as "700", "702",

    "703", "704", "706", "708", "710", "712", "714", respectively

Appropriate correction is required.

Specification Objections

3.   The specification is objected to because the following informalities:

- "J2EE" cited in P. 6, Line 13, is a registered trademark

- "MSMQ", "MQ Series", cited in P. 7, Line 28, are registered trademarks

- "Microsoft", "Sun Microsystems", cited in P. 8, Lines 28-29, are

    registered trademarks

- "mapped to the screen element 804", cited in P. 13, Line 6, should be

    corrected as "mapped to the screen element 802"

- "wherein the data objects 800 (see Figure 9)", cited in P. 18, Line 30, should be corrected as "wherein the data objects 800 (see Figure 8)"

- "Referring again to Figure 4, the remaining message and other workflow parts 105", cited in P. 20, Line 31, should be corrected as "Referring again to Figure 4, the remaining message and other workflow parts 405"

- "with the relationship (mapping 800)", cited in P. 23, Line 26, should be corrected as "with the relationship (mapping 840)"

- "Example screen component 404 given above", cited in P. 25, Line 26, should be corrected as "Example screen component 402 given above"

Appropriate correction is required.

Claim Rejections – 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 18 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5.   Claim 18 recites the limitation "the method" in lines 20-21. There is

insufficient antecedent basis for this limitation in the claim.

6.   Claim 36 recites the limitation "the method" in lines 15-16. There is

insufficient antecedent basis for this limitation in the claim.

Claim Rejections – 35 USC § 102(e)

The following is quotation of 35 U.S.C. 102(e) which form the basis for all

obviousness rejections set forth in this office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United
> States only if the international application designated the United States and was published under
> Article 21(2) of such treaty in the English language.

7.   Claims 1-12, 14, 18-29, 31, and 35-37 are rejected under 35

U.S.C. 102(e) as being anticipated by Hulai et al. (Pub. No. US 2003/0060896

A9) (hereinafter 'Hulai')

8.   **As to claim 1**, Hulai discloses a method for generating a screen element

of a wireless application based on a data object displayed on a user interface of

a wireless device, the application including a data component having at least one

data field definition and a screen component having at least one screen element

definition, the component definitions expressed in a structured definition

language, the method comprising the steps of: selecting the screen component

corresponding to the screen element selected for display (Fig. 1, element 18 –

User Interface; Fig. 2, element 67 – screen generation engine; Fig. 4, element 48

– User Interface Definition Section; [0031], Lines 5-8; [0035], Lines 1-3; [0049],

Lines 1-7; Fig. 8, element of S802 – i.e., create screen object; Fig. 9; Figs. 12-14;

[0112], Lines 1-11; [0113], Lines 1-4); identifying at least one mapping present in

the screen component ([0049], Lines 4-7 – a user interface definition section,

specific to the user interface for the device), the mapping for specifying a

relationship between the screen component and the data component as defined

by an identifier representing the mapping ([0085]; [0086] – the particular identity

of the mobile device on which the application is to be presented may be identified

by a suitable identifier, in the form of a header contained in the server side

application output; [0097] – virtual machine software further maintains a list

identifying each instance of each event and action object, and an associated

identifier of an event; i.e., Fig. 16II, Sec. 6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig.

16JJ, Sec. 6.7.3.2); selecting the data component mapped by the mapping

according to the mapping identifier (Fig. 4, element 52 – Device Local Data

Definition Section;[0105], Lines 6-9; [0122], Lines 1-7; [0049], Lines 9-11 – a

local data definition section defining the format of data to be stored locally on the

mobile device by the application) ; obtaining a data object field value

corresponding to the data field definition of the mapped data component (i.e.,

Fig. 16I, Sec. 3.2.3.3; [0039], Lines 1-7 – each of object classes includes

attributes used to store parameters defined by the XML file, and functions

allowing the XML entity to be processed at the mobile device); generating a

screen element from the screen element definition to include the data object field

value according to the format of the data field definition as defined in the mapped

data component (Fig. 4, element 48 – User Interface Definition Section; [0049],

Lines 1-7; Fig. 5, elements 48, 54, 56, 58 – User Interface – Device; [0078]-

[0079]; Fig. 8; [0091], Lines 6-11; [0095], Lines 1-6; [0098]; Fig. 12; [0114]).

9.   **As to claim 18**, Hulai discloses a system for generating a screen element

of a wireless application based on a data object displayed on a user interface of

a wireless device, the application including a data component having at least one

data field definition and a screen component having at least one screen element

definition, the component definitions expressed in a structured definition

language, the method comprising the steps of: a mapping manager for selecting

the screen component corresponding to the screen element and identifying at

least one mapping present in the screen component, the mapping for specifying

a relationship between the screen component and the data component as

defined by an identifier representing the mapping, the mapping manager for

selecting the data component mapped by the mapping according to the mapping

identifier ([0085]; [0086] – the particular identity of the mobile device on which the

application is to be presented may be identified by a suitable identifier, in the

form of a header contained in the server side application output; [0097] – virtual

machine software further maintains a list identifying each instance of each event

and action object, and an associated identifier of an event; i.e., Fig. 16II, Sec.

6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2); a data manager for

obtaining a data object field value corresponding to the data field definition of the

mapped data component (i.e., Fig. 16I, Sec. 3.2.3.3; [0039], Lines 1-7 – each of

object classes includes attributes used to store parameters defined by the XML

file, and functions allowing the XML entity to be processed at the mobile device);

and a screen manager for generating a screen element from the screen element

definition to include the data object field value according to the format of the data

field definition as defined in the mapped data component (Fig. 4, element 48 –

User Interface Definition Section; [0049], Lines 1-7; Fig. 5, elements 48, 54, 56,

58 – User Interface – Device; [0078]-[0079]; Fig. 8; [0091], Lines 6-11; [0095],

Lines 1-6; [0098]; Fig. 12; [0114]).

10.   **As to claim 35**, Hulai discloses a method for generating a data object of a

wireless application based on a change in a screen element displayed on a user

interface of a wireless device, the application including a data component having

at least one data field definition and a screen component having at least one

screen element definition, the component definitions expressed in a structured

definition language, the method comprising the steps of: selecting the screen

component corresponding to the screen element (Fig. 1, element 18 – User

Interface; Fig. 2, element 67 – screen generation engine; Fig. 4, element 48 –

User Interface Definition Section; [0031], Lines 5-8; [0035], Lines 1-3; [0049],

Lines 1-7; Fig. 8, element of S802 – i.e., create screen object; Fig. 9; Figs. 12-14;

[0112], Lines 1-11; [0113], Lines 1-4); identifying at least one mapping present in

the screen component, the mapping for specifying a relationship between the

screen component and the data component ([0085]; [0086] – the particular

identity of the mobile device on which the application is to be presented may be

identified by a suitable identifier, in the form of a header contained in the server

side application output; [0097] – virtual machine software further maintains a list

identifying each instance of each event and action object, and an associated

identifier of an event; i.e., Fig. 16II, Sec. 6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig.

16JJ, Sec. 6.7.3.2); selecting the data component mapped by the mapping (Fig.

4, element 52 – Device Local Data Definition Section;[0105], Lines 6-9; [0122],

Lines 1-7; [0049], Lines 9-11 – a local data definition section defining the format

of data to be stored locally on the mobile device by the application); obtaining a

changed value from the screen element corresponding to the mapped data

component ([0036] – parser may convert each XML tag contained in the

application definition file, and its associated data to tokens, for later processing;

Fig. 9; [0096], Lines 1-13; [0117], Lines 6-18); assigning the changed value to a

data field value of the data object according to the format of the data field

definition as defined in the mapped data component (Fig. 16K, Sec. 3.3.2, Sec.

3.3.3.3; Fig. 16R; Figs. 15A-15C; Fig. 16M, Sec. 3.3.4, Lines 1-3, Figure 4 – a

sample package definition).

11.   **As to claim 36**, Hulai discloses a device for generating a screen element

of a wireless application based on a data object displayed on a user interface of

a wireless device, the application including a data component having at least one

data field definition and a screen component having at least one screen element

definition, the component definitions expressed in a structured definition

language, the method comprising the steps of: means for selecting the screen

component corresponding to the screen element selected for display (Fig. 1,

element 18 – User Interface; Fig. 2, element 67 – screen generation engine; Fig.

4, element 48 – User Interface Definition Section; [0031], Lines 5-8; [0035], Lines

1-3; [0049], Lines 1-7; Fig. 8, element of S802 – i.e., create screen object; Fig. 9;

Figs. 12-14; [0112], Lines 1-11; [0113], Lines 1-4; [0049], Lines 4-7 – a user

interface definition section, specific to the user interface for the device); means

for identifying at least one mapping present in the screen component, the

mapping for specifying a relationship between the screen component and the

data component ([0085]; [0086] – the particular identity of the mobile device on

which the application is to be presented may be identified by a suitable identifier,

in the form of a header contained in the server side application output; [0097] –

virtual machine software further maintains a list identifying each instance of each

event and action object, and an associated identifier of an event; i.e., Fig. 16II,

Sec. 6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2); means for

selecting the data component mapped by the mapping (Fig. 4, element 52 –

Device Local Data Definition Section;[0105], Lines 6-9; [0122], Lines 1-7; [0049],

Lines 9-11 – a local data definition section defining the format of data to be

stored locally on the mobile device by the application); means for obtaining a

data object field value corresponding to the data field definition of the mapped

data component (i.e., Fig. 16I, Sec. 3.2.3.3; [0039], Lines 1-7 – each of object

classes includes attributes used to store parameters defined by the XML file, and

functions allowing the XML entity to be processed at the mobile device); means

for generating a screen element from the screen element definition to include the

data object field value according to the format of the data field definition as

defined in the mapped data component (Fig. 4, element 48 – User Interface

Definition Section; [0049], Lines 1-7; Fig. 5, elements 48, 54, 56, 58 – User

Interface – Device; [0078]-[0079]; Fig. 8; [0091], Lines 6-11; [0095], Lines 1-6;

[0098]; Fig. 12; [0114]).

12.   **As to claim 37**, Hulai discloses a computer program product for

generating a screen element of a wireless application based on a data object

displayed on a user interface of a wireless device, the application including a

data component having at least one data field definition and a screen component

having at least one screen element definition, the component definitions

expressed in a structured definition language, the computer program product

comprising: a computer readable medium (Fig. 1, element of Memory; [0031],

Lines 5-8); a mapping module stored on the computer readable medium for

selecting the screen component corresponding to the screen element and

identifying at least one mapping present in the screen component, the mapping

for specifying a relationship between the screen component and the data

component as defined by an identifier representing the mapping, the mapping

module for selecting the data component mapped by the mapping according to

the mapping identifier ([0085]; [0086] – the particular identity of the mobile device

on which the application is to be presented may be identified by a suitable

identifier, in the form of a header contained in the server side application output;

[0097] – virtual machine software further maintains a list identifying each instance

of each event and action object, and an associated identifier of an event; i.e., Fig.

16II, Sec. 6.6.3.2, Sec. Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2); a data

module stored on the computer readable medium for obtaining a data object field

value corresponding to the data field definition of the mapped data component

(i.e., Fig. 16I, Sec. 3.2.3.3; [0039], Lines 1-7 – each of object classes includes

attributes used to store parameters defined by the XML file, and functions

allowing the XML entity to be processed at the mobile device); and a screen

module stored on the computer readable medium for generating a screen

element from the screen element definition to include the data object field value

according to the format of the data field definition as defined in the mapped data

component (Fig. 4, element 48 – User Interface Definition Section; [0049], Lines

1-7; Fig. 5, elements 48, 54, 56, 58 – User Interface – Device; [0078]-[0079]; Fig.

8; [0091], Lines 6-11; [0095], Lines 1-6; [0098]; Fig. 12; [0114]).

13.   **As to claims 2** (incorporating the rejection in claim 1) and **19**

(incorporating the rejection in claim 18), Hulai discloses the method and the

system wherein a plurality of the data field definitions of the data component is

shared between the screen component and the data component as represented

by the mapping (Fig. 16G, Sec. 2.2 – the key to ARML usage is the application

definition file held on the AIRIX server. This file defines the AIRIX tables for the

application, the allowed message set and the user interface definitions for the

application on a given device).

14.   **As to claim 3** (incorporating the rejection in claim 2), Hulai discloses the

method further comprising the step of linking the plurality of data field definitions

to corresponding ones of the screen element definitions of the screen component

as represented by the identifier (Fig. 16S, Sec. 5.1.3.1 (The SCREEN tag) – an

identifier for the screen; [0086]; [0097], Lines 6-8; [0098]; [0109]).

15.   **As to claim 4** (incorporating the rejection in claim 2), Hulai discloses the

method further comprising the step of detecting a user event of the user interface

related to the screen element (Fig. 9, elements of S918, S920, S922, S924;

[0096], Lines 1-13; Fig. 10; [0101]-[0103]).

16.   **As to claim 5** (incorporating the rejection in claim 4), Hulai discloses the

method further comprising the step of identifying the mapping in the screen

component corresponding to the linked data component of the affected screen

element ([0085]; [0086] – the particular identity of the mobile device on which the

application is to be presented may be identified by a suitable identifier, in the

form of a header contained in the server side application output; [0097] – virtual

machine software further maintains a list identifying each instance of each event

and action object, and an associated identifier of an event; i.e., Fig. 16II, Sec.

6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2).

17.   **As to claim 6** (incorporating the rejection in claim 5), Hulai discloses the

method further comprising the step of updating the data object in a memory using

the data field definition of the linked data component (Fig. 16K, Sec. 3.3.2,

3.3.3.3; Fig. 16R; Figs. 15A-15C; Fig. 16M, Sec. 3.3.4, Lines 1-3, Figure 4 – a

sample package definition).

18.   **As to claim 7** (incorporating the rejection in claim 5), Hulai discloses the

method further comprising the step of creating a new one of the data object in a

memory using the data field definition of the linked data component (Fig. 2;

[0035]-[0036] – object classes corresponding to XML entities supported by the

virtual machine software, and possibly contained within an application definition

file).

19.   **As to claims 8** (incorporating the rejection in claim 2) and **25**

(incorporating the rejection in claim 19), Hulai discloses the method and the

system wherein the data object is passed to the user interface as a screen

parameter ([0039], Lines 1-7 – object classes define objects that allow device to

process each of the supported XML entities at the mobile device; [0041], Lines 5-

7 – at run time, instances of object classes corresponding to these classes are

created and populated with parameters contained within application definition file,

as required; i.e., Fig. 16L, Sec. 3.3.3.5).

20.   **As to claims 9** (incorporating the rejection in claim 2) and **26**

(incorporating the rejection in claim 19), Hulai discloses the method and the

system wherein a first screen element definition is mapped by a first one of the

identifiers to a first one of the data components and a second screen element

definition is mapped by a second one of the identifiers to a second one of the

data components different from the first data component ((([0085]; [0086] – the

particular identity of the mobile device on which the application is to be presented

may be identified by a suitable identifier, in the form of a header contained in the

server side application output; [0097] – virtual machine software further maintains

a list identifying each instance of each event and action object, and an

associated identifier of an event; i.e., Fig. 16II, Sec. 6.6.3.2, Sec. 6.6.3.3, Sec.

6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2).

21.   **As to claims 10** (incorporating the rejection in claim 9) and **27**

(incorporating the rejection in claim 26), Hulai discloses the method and the

system wherein the first screen element definition and the second screen

element definition are mapped to the same data component using the first

identifier ([0085]; [0086] – the particular identity of the mobile device on which the

application is to be presented may be identified by a suitable identifier, in the

form of a header contained in the server side application output; [0097] – virtual

machine software further maintains a list identifying each instance of each event

and action object, and an associated identifier of an event; i.e., Fig. 16II, Sec.

6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2).

22.   **As to claims 11** (incorporating the rejection in claim 2) **28** (incorporating

the rejection in claim 19) and Hulai discloses the method and the system wherein

the structured definition language is XML based (Abstract, Lines 12-17).

23.   **As to claims 12** (incorporating the rejection in claim 2) and **29**

(incorporating the rejection in claim 19) Hulai discloses the method and the

system wherein the identifier is a simple primary key ([0070]; i.e., Fig. 15A,

PK=LNGRECIPIENTID; Fig. 15B – primary key; Fig. 16I, Sec. 3.2.3.1 – PK –

which of the table fields is the primary key for the table; Fig. 16J, Figure 2 –

sample email schema, primary key, Figure 3 – a sample table definition section,

PK=LNGMESSAGEID, PK=LNGRECIPIENTID).

24.   **As to claim 14** (incorporating the rejection in claim 2), Hulai discloses the

method further comprising the step of receiving an asynchronous communication

message by the device via a network coupled to the device, the message

including a message data object (Fig. 1; Fig. 3; [0043]; Abstract, Lines 3-17;

[0008] through [0011]).

25.   **As to claim 20** (incorporating the rejection in claim 19), Hulai discloses

the system wherein the plurality of data field definitions are linked to

corresponding ones of the screen element definitions of the screen component

as represented by the identifier (Fig. 16S, Sec. 5.1.3.1 (The SCREEN tag) – an

identifier for the screen; [0086]; [0097], Lines 6-8; [0098]; [0109]).

26.   **As to claim 21** (incorporating the rejection in claim 19), Hulai discloses

the system further comprising the presentation manager configured for detecting

a user event of the user interface related to the screen element (Fig. 9, elements

of S918, S920, S922, S924; [0096], Lines 1-13; Fig. 10; [0101]-[0103]).

27.   **As to claim 22** (incorporating the rejection in claim 21), Hulai discloses

the system further comprising the mapping manager configured for identifying the

mapping in the screen component corresponding to the linked data component of

the affected screen element ([0085]; [0086] – the particular identity of the mobile

device on which the application is to be presented may be identified by a suitable

identifier, in the form of a header contained in the server side application output;

[0097] – virtual machine software further maintains a list identifying each instance

of each event and action object, and an associated identifier of an event; i.e., Fig.

16II, Sec. 6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2).

28.   **As to claim 23** (incorporating the rejection in claim 22), Hulai discloses

the system further comprising the data manager configured for updating the data

object in a memory using the data field definition of the linked data component

(Fig. 16K, Sec. 3.3.2, 3.3.3.3; Fig. 16R; Figs. 15A-15C; Fig. 16M, Sec. 3.3.4,

Lines 1-3, Figure 4 – a sample package definition).

29.   **As to claim 24** (incorporating the rejection in claim 22), Hulai discloses

the system further comprising the data manager configured for creating a new

one of the data object in a memory using the data field definition of the linked

data component (Fig. 2; [0035]-[0036] – object classes corresponding to XML

entities supported by the virtual machine software, and possibly contained within

an application definition file).

30.   **As to claim 31** (incorporating the rejection in claim 19), Hulai discloses

the system further comprising a communication manager for receiving an

asynchronous communication message by the device via a network coupled to

the device, the message including a message data object (Fig. 1; Fig. 3; [0043];

Abstract, Lines 3-17; [0008] through [0011]).

Claim Rejections – 35 USC § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the art to which said subject
> matter pertains. Patentability shall not be negatived by the manner in which the invention was
> made.

31.   Claims 15-17 and 32-34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hulai in view of Saulpaugh et al., (Pat. No. US 7,010,573 B1)

(hereinafter 'Saulpaugh')

32.   **As to claim 15** (incorporating the rejection in claim 2), Hulai discloses

employing Virtual Machine and XML messaging technologies (Abstract, Lines 12-

17), but does not explicitly disclose the method further comprising the step of

checking the message for the mapping corresponding to the data component of

the application provisioned on the device.

However, in an art of message gates using a shared transport in a

distributed computing environment, Saulpaugh discloses checking the message

for the mapping corresponding to the data component of the application

provisioned on the device (Col. 7, Lines 1-6 – the messages may be in a data

representation language such as eXtensible MarkOup Languages (XML), 12-16 –

each such message may be sent through a client message gate that may verify

the correctness of the message).

Therefore, it would have been obvious to one of ordinary skill in the art, at

the time the invention was made to combine the teachings of Saulpaugh into the

Hulai's system to further provide the method further comprising the step of

checking the message for the mapping corresponding to the data component of

the application provisioned on the device in Hulai system.

The motivation is that it would further enhance the Hulai's system by

taking, advancing and/or incorporating Saulpaugh's system which offers

significant advantages for providing a simple way to connect various types of

intelligent devices to allow for communication and sharing of resources while

avoiding the interoperability and complex configuration problems existing in

conventional networks as once suggested by Saulpaugh (i.e., Col. 2, Lines 3-7).

33.   **As to claim 16** (incorporating the rejection in claim 15), Hulai discloses

the method further comprising the step of updating the message data object

corresponding to the message in a memory using the data field definition of the

linked data component and then reflecting that data change in the screen

element linked to the data object ([0085]; [0086] – the particular identity of the

mobile device on which the application is to be presented may be identified by a

suitable identifier, in the form of a header contained in the server side application

output; [0097] – virtual machine software further maintains a list identifying each

instance of each event and action object, and an associated identifier of an

event; i.e., Fig. 16II, Sec. 6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec.

6.7.3.2; Fig. 9; [0096], Lines 16-19).

34.   **As to claim 17** (incorporating the rejection in claim 15), Hulai discloses

the method further comprising the step of creating the data object corresponding

to the message in a memory using the data field definition of the linked data

component ([0040], Lines 4-9; [0041], Lines 5-7; i.e., [0051]; Fig. 9; [0096], Lines

16-19).

35.   **As to claim 32** (incorporating the rejection in claim 19), Hulai discloses

employing Virtual Machine and XML messaging technologies (Abstract, Lines 12-

17), but does not explicitly disclose the system further comprising the mapping

manager configured for checking the message for the mapping corresponding to

the data component of the application provisioned on the device.

However, in an art of message gates using a shared transport in a

distributed computing environment, Saulpaugh discloses the system further

comprising the mapping manager configured for checking the message for the

mapping corresponding to the data component of the application provisioned on

the device (Col. 7, Lines 1-6 – the messages may be in a data representation

language such as eXtensible MarkOup Languages (XML), 12-16 – each such

message may be sent through a client message gate that may verify the

correctness of the message).

Therefore, it would have been obvious to one of ordinary skill in the art, at

the time the invention was made to combine the teachings of Saulpaugh into the

Hulai's system to further provide the system further comprising the mapping

manager configured for checking the message for the mapping corresponding to

the data component of the application provisioned on the device in Hulai system.

The motivation is that it would further enhance the Hulai's system by

taking, advancing and/or incorporating Saulpaugh's system which offers

significant advantages for providing a simple way to connect various types of

intelligent devices to allow for communication and sharing of resources while

avoiding the interoperability and complex configuration problems existing in

conventional networks as once suggested by Saulpaugh (i.e., Col. 2, Lines 3-7).

36.   **As to claim 33** (incorporating the rejection in claim 32), Hulai discloses

the system further comprising the data manager configured for updating the

message data object in a memory using the data field definition of the linked data

component ([0085]; [0086] – the particular identity of the mobile device on which

the application is to be presented may be identified by a suitable identifier, in the

form of a header contained in the server side application output; [0097] – virtual

machine software further maintains a list identifying each instance of each event

and action object, and an associated identifier of an event; i.e., Fig. 16II, Sec.

6.6.3.2, Sec. 6.6.3.3, Sec. 6.6.3.4; Fig. 16JJ, Sec. 6.7.3.2; Fig. 9; [0096], Lines

16-19).

37.   **As to claim 34** (incorporating the rejection in claim 32), Hulai discloses

the system further comprising the data manager configured for creating the

message data object in a memory using the data field definition of the linked data

component ([0040], Lines 4-9; [0041], Lines 5-7; i.e., [0051]; Fig. 9; [0096], Lines

16-19).

38.   Claims 13 and 30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hulai in view of Greene et al., (Pat. No. US 6,868,441 B2)

(hereinafter 'Greene')

39.   **As to claims 13** (incorporating the rejection in claim 2) and **30**

(incorporating the rejection in claim 19) Hulai discloses employing Virtual

Machine and XML messaging technologies (Abstract, Lines 12-17), but does not

explicitly disclose the method and the system wherein the identifier is a

composite key.

However, in an art of method and system for implementing a global

ecosystem of interrelated services, Greene discloses the method and the system

wherein the identifier is a composite key (Col. 69, Lines 1-10 – for example, the

PK for a given entity might be a string or an integer, or it might be a composite

key having more than one component).

Therefore, it would have been obvious to one of ordinary skill in the art, at

the time the invention was made to combine the teachings of Greene into the

Hulai's system to further provide the method and the system wherein the

identifier is a composite key in Hulai system.

The motivation is that it would further enhance the Hulai's system by

taking, advancing and/or incorporating Greene's system which offers advantages

for providing alternate, domain specific primary keys that can be used by the

specific application, or by custom logic within the entity implementation, and

checked for uniqueness by the central entity manager, using for example, a

hashing or directory service as once suggested by Greene (i.e., Col. 69, Lines 1-

10).

Conclusion

40.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Paul et al., Techniques For Navigating In Mobile Applications (Pat. No. US 7,051,080 B1)

41.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben C. Wang whose telephone number is 571-270-1240. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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9199 (IN USA OR CANADA) or 571-272-1000.

TUAN DAM
SUPERVISORY PATENT EXAMINER

BCW

April 25, 2007